LibManage-Design Document

Database Structure

* **Book model**- Each object of this model represents a book in the library.
  + It has fields for storing Title, Author, ISBN, Publication, genre, quantity and summary.
  + Quantity stores the number of those books present inside the Library at any time.
* **User Profile model**- An object of this model stores the details of a user of the LibManage system. It has many fields but as of now, username, email, password and account type fields are being used in the webapp. The account type stores whether the account is of a normal user, or librarian of admin.
* **Book Request model**- An object of this model stores the details of a request made to borrow a book from library.
  + It stores username of user who made that request and details of book which the user wants to borrow and period for which the user wants to borrow the book.
* **Book Borrowed model-** An object of this model stores the details of a book which has been borrowed from library. The date of issue, due date, username of user who borrowed the book and book details are contained in this.
* **System\_Variable\_Values model-** Only a single object exists of this model which stores details common for all books, users of library. E.g. penalty any user has to pay on losing a book and the penalty imposed when due date to return a book is expired.

**Website structure**

* User’s can register for the library through the register section.
* A normal user has the options to see all the books available in library
* Books can be searched on the basis of title, author or Genre
* On opening the details page of book, the user can borrow the book and specify the period for which the book is to be borrowed.
* When a user pressed the borrow book button, a request is lodged which can be seen by user in Log section.
* After a librarian or admin accepts the request, it comes in the borrowed book section and user can go to library to take the book.
* Librarian’s and Admin’s can add a book, edit its details or directly issue the book to a user.
* Librarian’s and Admin’s also have the access to see all the user’s enrolled in the library system, and Admin can change the access level of a user to librarian, user, or admin.
* Admins can change the different penalty amounts.
* Admins can change the account type of different users as well.